

ABSTRACT OF THE DISCLOSURE

5 An antijam module (10) for GPS utilizing the vertical and horizontal polarizations of signal output by each antenna element in an array of antenna elements. This effectively doubles the number of channels from the conventional number of channels (N) to $2N$. Each of these channels is uniquely weighted in accordance with conventional teachings such that the system operates with a capability to null $2N-1$
10 jammers. Another aspect of the invention is the provision of a system and method for moving the reference channel from one channel to another in respect to the detection of received power levels. In specific implementations, the applied weights are dithered in a predetermined direction and a predetermined amount to ascertain when and whether to pass the reference channel designation.

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